

AMENDMENTS TO THE CLAIMS

1. (canceled)

1. (canceled)

2. (canceled)

3. (canceled)

4. (canceled)

5. (canceled)

6. (canceled)

7. (currently amended) ~~The embossing tool formed by the method of claim 6, An~~
embossing tool made by the process comprising the steps of:

providing a silicon substrate;

forming a first photoresist layer onto a top surface of said substrate;

exposing a portion of said photoresist layer at a plurality of locations to a collimated image of a source of electromagnetic radiation wherein said step of exposing further includes moving said collimated image across said photoresist layer in a 2-dimensional raster manner at a variable speed thereby providing differing exposure doses to said plurality of individual sites

developing said first photoresist layer thereby removing said exposed portions of said photoresist layer and exposing a portion of said silicon substrate, said portions of said photoresist layer not exposed to said collimated image remaining intact;

anisotropically etching said exposed portions of said silicon substrate with a first reactive plasma for a first period of time;

etching said undeveloped photoresist portions with a second reactive plasma for a second time to remove an incremental part of said undeveloped portion of said photoresist layer, said second reactive plasma exposing additional portions of said silicon substrate;

repeating said steps of etching until a plurality of etched cavities extending into said substrate thickness are provided, wherein said cavities have one or more surfaces comprising non-prismatic surfaces, and wherein some of said surfaces extend to different depths into said substrate thickness;

removing remaining portions of said photoresist layer;

depositing a thin first layer comprising a metal or metals onto said silicon top surface and onto said etched walls and bases;

depositing a thicker second metal layer over said first layer such that said etched structures are completely filled to form a plurality of metal structures; and

removing said silicon substrate to provide an embossing tool wherein said metal structures comprise one or more 3-dimensional projections, each of said one or more 3-dimensional projections having one or more surfaces, wherein some of said surfaces are non-prismatic surfaces.

8. (original) The embossing tool of claim 7, wherein said 3-dimensional projections are wall-like or post-like or both.

9. (original) The embossing tool of claim 7, wherein said 3-dimensional projections have cross sections that are rectangular, triangular, trapezoidal, or parabolic or hyperbolic.

10. (original) The embossing tool of claim 7, wherein some of said non-prismatic surfaces are curvilinear.

11. (original) The embossing tool of claim 7, wherein some of said surfaces intersect to form an edge or a corner.

12. (canceled)

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